

Prevalence of abdominal wall defects in the United Kingdom. Rates are cases per 10 000 total births

Geographical coverage (reference)	Years	Total No of births	Induced abortions included?	Omphalocele		Gastroschisis		Ratio of omphalocele to gastroschisis (95% CI)	Both	
				No	Rate (95% CI)	No	Rate (95% CI)		No	Rate (95% CI)
Glasgow (current study)	1980-93	179 067	Yes	73	4.1 (3.1 to 5.0)	24	1.3 (0.8 to 1.9)	3.0 (1.9 to 4.8)	97	5.4 (4.3 to 6.5)
Northern region ⁴	1988-92	201 973	Yes	43	2.1 (1.5 to 2.8)	56	2.8 (2.1 to 3.5)	0.8 (0.5 to 1.1)	99	4.9 (3.9 to 5.9)
Liverpool ⁵	1980-8	184 530	Yes	60	3.3 (2.4 to 4.1)	28	1.5 (1.0 to 2.1)	2.1 (1.4 to 3.4)	88	4.8 (3.8 to 5.8)
Belfast ³	1980-92	355 875	Yes	105	3.0 (2.4 to 3.5)	29	0.8 (0.5 to 1.1)	3.6 (2.4 to 5.5)	134	3.8 (3.1 to 4.4)
				$\chi^2=12.2$, $P=0.007$		$\chi^2=33.5$, $P<0.001$		$\chi^2=33.6$, $P<0.0001$	$\chi^2=8.5$, $P=0.036$	
Scotland ²	1988-95	515 759	No	63	1.2 (0.9 to 1.5)	97	1.9 (1.5 to 2.3)	0.6 (0.5 to 0.9)	160	3.1 (2.6 to 3.6)
England and Wales ^{1*}	1987-93	4 859 221	No	448	0.9 (0.8 to 1.0)	539	1.1 (1.0 to 1.2)	0.8 (0.7 to 0.9)	987	2.0 (1.9 to 2.2)

*Prevalence of all abdominal wall defects ranged from 1.23 per 10 000 births in South West Thames region to 3.11 per 10 000 births in Northern region.

in our study is about four times higher than that reported by the Office for National Statistics for England and Wales. However, this striking discrepancy may reflect substantial underascertainment by the Office for National Statistics of cases of omphalocele.⁴ In particular, these national data excluded terminations of pregnancy following prenatal diagnosis, whereas almost half of the cases in our series were terminated. Data from EUROCAT for 1980-92 indicate that the ratio of omphalocele to gastroschisis was 2.5,³ a value much closer to that of Glasgow (3.0) than that of the Office for National Statistics (0.8). By contrast, the prevalence of gastroschisis in Glasgow is comparable with that of the area covered by the Office for National Statistics, particularly its northern and western regions.

The reported gradient from south to north in the prevalence of abdominal wall defects (especially omphalocele) in the United Kingdom and in Europe as a whole⁵ is similar to that observed for neural tube defects and could reflect a common aetiology. Further work is needed to determine the relative influence of ascertainment, maternal factors (such as age, socioeconomic group, and smoking), and underlying secular trends on these geographical variations.

We thank Mrs Hilary Miller and Dr John Womersley of the department of public health, Greater Glasgow Health Board, for their help and support in collating and analysing data from the Glasgow Register of Congenital Anomalies. The EUROCAT network is supported by the European Commission.

Contributors: DHS initiated the study, helped plan the methods, and participated in the analysis, in interpreting data, and in writing the paper. SR helped to conceive the study, collated the data, and contributed to the analysis and writing the paper as part of a wider project on the epidemiology of abdominal wall defects. WHG contributed to methodological aspects of the study, including the analysis, presentation, and interpretation of the results. DHS is guarantor for the study.

Funding: None.

Conflict of interest: None.

- 1 Tan KH, Kilby MD, Whittle MJ, Beattie BR, Booth IW, Botting BJ. Congenital anterior abdominal wall defects in England and Wales 1987-93: retrospective analysis of OPCS data. *BMJ* 1996;313:903-6.
- 2 Chalmers J, Forrest J, Cant B, Hollinsworth M. Congenital anterior abdominal wall defects. *BMJ* 1997;314:371-2.
- 3 EUROCAT Working Group. *Surveillance of congenital anomalies in Europe 1980-1992*. Brussels: Institute of Hygiene and Epidemiology, 1995. (EUROCAT report 6.)
- 4 Dillon E, Renwick M, Rankin J. Congenital anterior abdominal wall defects. *BMJ* 1997;314:372.
- 5 Calzolari E, Bianchi F, Dolk H, Milan M, EUROCAT Working Group. Omphalocele and gastroschisis in Europe: a survey of 3 million births. *Am J Med Genet* 1995;58:187-94.

(Accepted 27 March 1998)

Fifty years ago The hippocratic oath

The attempt of the World Medical Association to draft a pledge which can be adopted by medical men and women as a short code of ethics has given some publicity to the Hippocratic Oath and also to the mistaken idea that this Oath is sworn to by the newly qualified doctor. It is reproduced in very few histories of medicine, and so we print below the translation of the Pagan Oath given by Mr. W. H. S. Jones in his book *The Doctor's Oath* (Cambridge University Press, 1924). There are other versions of the Oath, one, for example, "in so far as a Christian may swear it," and also an Arabic version.

Pagan Oath

"I swear by Apollo Physician, by Asclepius, by Health, by Heal-all, and by all the gods and goddesses, making them witnesses, that I will carry out, according to my ability and judgment, this oath and this indenture:

"To regard my teacher in this art as equal to my parents; to make him partner in my livelihood, and when he is in need of money to share mine with him; to consider his offspring equal to my brothers; to teach them this art, if they require to learn it, without fee or indenture; and to impart precept oral instruction, and all the other learning, to my sons, to the sons of my teacher,

and to the pupils who have signed the indenture and sworn obedience to the physicians' Law, but to none other.

"I will use treatment to help the sick according to my ability and judgment, but I will never use it to injure or wrong them.

"I will not give poison to anyone though asked to do so, nor will I suggest such a plan. Similarly I will not give a pessary to a woman to cause abortion. But in purity and in holiness I will guard my life and my art.

"I will not use the knife either on sufferers from stone, but I will give place to such as are craftsmen therein.

"Into whatsoever houses I enter, I will do so to help the sick, keeping myself free from all intentional wrongdoing and harm, especially from fornication with woman or man, bond or free.

"Whatsoever in the course of practice I see or hear (or even outside my practice in social intercourse) that ought never to be published abroad, I will not divulge, but consider such things to be holy secrets.

"Now if I keep this oath and break it not, may I enjoy honour, in my life and art, among all men for all time; but if I transgress and forswear myself, may the opposite befall me."

(*BMJ* 1948;ii:616)